

Appl. No. 09/876,411
Amdt. Dated June 30, 2008
Reply to Office Action of January 28, 2008

RECEIVED
CENTRAL FAX CENTER
JUN 30 2008

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A communication apparatus comprising:
an antenna for transmitting and/or receiving a wireless signal,
a signal processing circuit for processing a signal corresponding to a wireless signal received by the antenna,
a conductive case surrounding and housing all or part of the signal processing circuit,
an electro-magnetic wave absorber with one surface adjacent a predetermined area of the conductive case for absorbing electro-magnetic waves and thereby reducing electro-magnetic waves reaching a user of the communication apparatus, and
a conductive member provided at another surface of the electromagnetic wave absorber and being electrically connected to the conductive case, and further wherein the electro-magnetic wave absorber is physically located between a speaker of the communication apparatus and the conductive case, the conductive member being located closest to the speaker.
2. (Previously Presented) A communication apparatus as set forth in claim 1, wherein said electro-magnetic wave absorber and said conductive member are arranged between said conductive case and a head of a user of the communication apparatus.
3. (Currently Amended) A portable telephone comprising:

Appl. No. 09/876,411
Amdt. Dated June 30, 2008
Reply to Office Action of January 28, 2008

an antenna for transmitting and/or receiving a wireless signal;
a microphone for generating a sound signal corresponding to an input sound;
a circuit for generating a wireless signal corresponding to said sound signal generated by said microphone;
a conductive shield case surrounding and housing all or part of said circuit;
an electro-magnetic wave absorber with one surface in contact with a predetermined area of the shield case for absorbing electro-magnetic waves and thereby reducing the amount of electro-magnetic waves reaching a user of said telephone device; and
a conductive member provided at another surface of the electric wave absorber and being electrically connected to the conductive shield case, and further wherein the electro-magnetic wave absorber is physically located between a speaker of the portable telephone and the conductive case, the conductive member being located closest to the speaker.

4. (Previously Presented) A portable telephone as set forth in claim 3, wherein said circuit comprises:
- a transmitting circuit for generating a wireless signal corresponding to a sound signal from the microphone,
 - a receiving circuit for generating a sound signal in response to a wireless signal received by the antenna and outputting the sound signal, and
 - a printed circuit board containing the transmitting circuit and the receiving

Appl. No. 09/876,411
Amdt. Dated June 30, 2008
Reply to Office Action of January 28, 2008

circuit, and wherein

the shield case surrounds and houses the transmitting and receiving circuits and the printed circuit board to prevent electromagnetic interference between the transmitting and receiving circuits and the antenna.

5. (Previously Presented) A portable telephone as set forth in claim 3, wherein said electro-magnetic wave absorber is arranged at an area at a surface of said shield case close to a head of a user of the portable telephone at the time of a call.

6. (Previously Presented) A portable telephone as set forth in claim 3, wherein said electro-magnetic wave absorber is closely bonded to an area at a surface of said shield case close to a head of a user of the portable telephone at the time of a call.

Claim 7. (Canceled).

8. (Previously Presented) A portable telephone as set forth in claim 3, wherein said conductive member and said shield case are connected by a metal wiring.

9. (Previously Presented) A portable telephone as set forth in claim 3, wherein the conductive member comprises a metal plate fixed to the shield case and the electro-magnetic wave absorber is formed by inserting a member between the surface of the shield case and the metal plate.

Appl. No. 09/876,411
Amdt. Dated June 30, 2008
Reply to Office Action of January 28, 2008

10. (Previously Presented) A portable telephone as set forth in claim 3, wherein said electro-magnetic wave absorber includes a magnetic loss material.

11. (Previously Presented) A portable telephone as set forth in claim 10, wherein said electromagnetic wave absorber is made in a desired shape from a mixture of said magnetic loss material and a synthetic resin.

12. (Previously Presented) A portable telephone as set forth in claim 4, further comprising

a switching circuit and a feeder on the printed circuit board for supplying the wireless signal from the transmitting circuit to the antenna and supplying the wireless signal from the antenna to the receiving circuit and

said feeder used for connecting the switching circuit and the antenna, and

the electro-magnetic wave absorber is closely bonded to a portion of the shield case located between the feeder and the receiving circuit.

13. (Previously Presented) A portable telephone as set forth in claim 3, wherein said shield case is made of an insulating material and has a conductive layer formed on its surface and

said conductive layer is connected to a layer of a ground level voltage of said printed circuit board.

Appl. No. 09/876,411
Arndt. Dated June 30, 2008
Reply to Office Action of January 28, 2008

14. (Previously Presented) A portable telephone as set forth in claim 4, wherein said shield case is made of a conductive material and is connected to a layer of a ground level voltage of said printed circuit board.

15. (Previously Presented) A portable telephone as set forth in claim 4, further comprising an outer housing made of an insulating material for housing said transmitting and receiving circuit, said shield case, said electro-magnetic wave absorber, and said microphone, wherein

said receiving circuit is arranged in the vicinity of one end of said housing,
said microphone is arranged in the vicinity of another end of said housing, and
said antenna is a retractable antenna able to extend from said one end in the longitudinal direction of said housing.

16. (Previously Presented) A portable telephone as set forth in claim 15, further comprising

a switching circuit on said printed circuit board for supplying said wireless signal from said transmitting circuit to said antenna, and for supplying said wireless signal from said antenna to said receiving circuit and

a feeder for connecting said switching circuit and said antenna, wherein
said electro-magnetic wave absorber is closely bonded at the portion of said shield case located between said receiving circuit and said feeder.

Appl. No. 09/876,411
Amdt. Dated June 30, 2008
Reply to Office Action of January 28, 2008

Claims 17. – 18. (Canceled)

19. (Previously Presented) The communication apparatus of claim 1, wherein the conductive member is electrically connected to a ground layer of the signal processing circuit.

20. (Previously Presented) The portable telephone of claim 3, wherein the conductive member is electrically connected to a ground layer of the circuit.

21. (Previously Presented) The communication apparatus of claim 1, further comprising an outer housing separate from said shield case, which surrounds and confines said conductive case, said electro-magnetic wave absorber, said signal processing circuit, and said conductive member; and

wherein said electro-magnetic wave absorber is arranged between said conductive case and said outer housing on a side of the conductive case facing a head of a user of the communication apparatus when in use.

22. (Previously Presented) The communication apparatus of claim 21, wherein said antenna is provided substantially outside of said outer housing, and a feeder is formed within the outer housing for connecting said antenna and said signal processing circuit.

Appl. No. 09/876,411
Amdt. Dated June 30, 2008
Reply to Office Action of January 28, 2008

23. (Previously Presented) The communication apparatus of claim 21, wherein said conductive case surrounds substantially the entire signal processing circuit.

24. (Previously Presented) The portable telephone of claim 3, further comprising an outer housing separate from said shield case, which surrounds and confines said conductive shield case, said electro-magnetic wave absorber, said microphone, said circuit, and said conductive member; and

wherein said electro-magnetic wave absorber is arranged between said conductive shield case and said outer housing on a side of the conductive shield case facing a head of a user of the portable telephone when in use.

25. (Previously Presented) The portable telephone of claim 24, wherein said antenna is provided substantially outside of said outer housing, and a feeder is formed within the outer housing for connecting said antenna and said circuit.

26. (Previously Presented) The portable telephone of claim 3, wherein said conductive case surrounds substantially the entire signal processing circuit.

27. (Previously Presented) The communication apparatus of claim 1, wherein said electro-magnetic wave absorber includes a magnetic loss material.